

predominantly cloudy

**functional division of the window in three horizontal strip windows equipped with different daylighting systems**



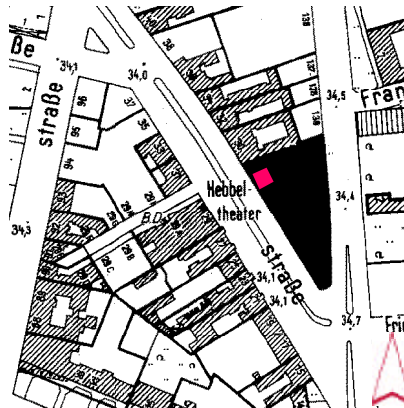
The Willy-Brandt-Building is the new headquarters of the socialdemocratic party. It comprises offices, meeting and exhibition facilities as well as retail spaces. The shape of the building is triangular, resulting in a central atrium. An arcade through the building, that also serves as the main entrance, links the two adjacent streets. To lower the energy use, measures such as providing natural ventilation for the offices, were also part of the overall design strategy.



Whereas the offices around the core of the building receive natural light through the atrium, the perimeter spaces depend on daylight penetration through the facade. The windows are generally divided into three horizontal segments. Horizontally fixed exterior tinted blue glass overhangs shade the two lower rows of windows while the upper row is equipped with daylight redirecting ocasolar lamellas within the cavity of the glass. Additional interior blinds were installed to control glare. The two upper stories of the building are set back allowing the instalation of skylights for the spaces below. Especially the smaller offices do not seem to benifit from this additional daylight measure, however. Due to the skylight's deep light shaft and it's immediate adjacency to the window, the additional light looses its effectiveness.



Most of the wiring is located in a double floor. The low sill permits a good view to the outside. The rear wall incorporates a closet while recessed doors widen the entrance area to the offices.



Urban environment of the Willy-Brandt-Building, the selected room is orientated to the Stresemann Straße.



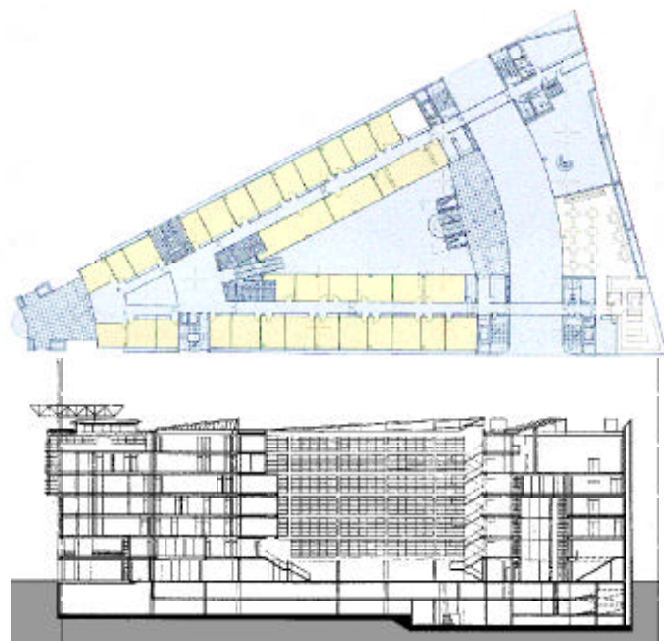
Fisheye view showing the obstruction of the selected office room in the fifth story, blue glass overhangs obstruct the sky.



Photograph showing the sharp edged front of the Willy-Brandt-Building.



Interior view of the atrium.



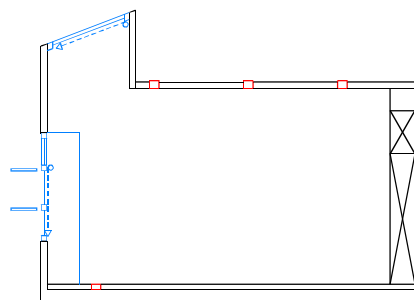
Longitudinal section, floor plan of the first story.



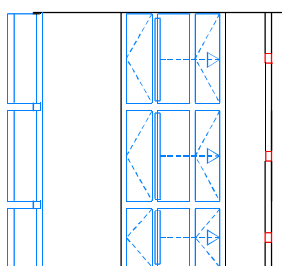
Fisheye view taken from the side wall showing the combination of skylight and window.



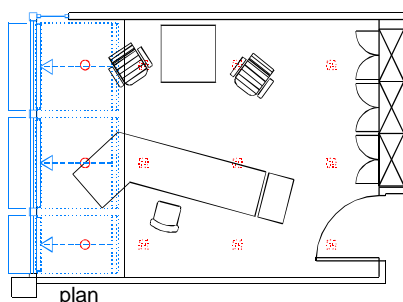
The upper window casement is equipped with Okasolar lamellas; the horizontal exterior glass overhangs do not obstruct the view.



cross-section



window wall



plan

## building data

size	17 736 m <sup>2</sup>
number of stories	7
architect	Helge Bofinger
year of completion	1997

## office room

daylight strategy	bilateral, side-lighting and top-lighting
dimensions (depth/width/height)	5,4 m / 3,9 m / 3,0 m
room surface	21,6 m <sup>2</sup>
floor	carpet 24%
wall	white 70%
door	varnished timber 28%
ceiling	white metal board 59%
table	coated timber 45%
radiators	enamel paint 59%
window frame	blue coating 8%
facade, lower windows	double, low-e
facade, upper window	double, Okasolar inlay
lamp types	compact fluorescent lamps
installed power density	6 W/m <sup>2</sup>
control strategy	manual switching

facade	southwest facade		skylight	
data	orientation	208 °	sky	
	glazed area	4,7 m <sup>2</sup>	4,9 m <sup>2</sup>	
	opening index	0,40	0,23	
function	daylighting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	view outside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	ventilation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	operable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	shading	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	redirection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
systems	horiz. gl. lamellas		fabric	
function	sun shading	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	glare protection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	redirection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	inside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
location	window pane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	outside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	moveable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>